S/N 09/727,054 **AMENDMENT** 

**PATENT** ATTY DOCKET NO. 0266-0001 p. 5

- 15. (canceled)
- 16. (Currently amended) A method for automatically constructing arrays multiple instances of complex shapes based on a simple shapes shape, said method employing a computing system having graphic display means, data entry means, data processing means and a memory, said method comprising the steps of:

entering and storing said complex shapes into said computing system; entering and storing shape translation data into said computing system; entering and storing said simple shapes shape into said computing system; computing said arrays multiple instances of complex shapes based on the parameters of said simple shapes shape; and

displaying said arrays multiple instances of complex shapes on said monitor.

- 17. (new) A method as claimed in Claim 16, further comprising automatically offsetting said multiple instances of complex shapes from each other based on said parameters of said simple shape.
- 18. (new) A method for automatically constructing multiple identical or modified instances of complex shapes based on a simple shape, said method employing a computing system having graphic display means, data entry means, data processing means and a memory, said method comprising the steps of:

entering and storing said complex shapes into said computing system; entering and storing shape translation data into said computing system; entering and storing said simple shape into said computing system; computing said multiple identical or modified instances of complex shapes based on parameters of said simple shape; and

displaying said multiple identical or modified instances of complex shapes on said monitor.

- 19. (new) A method claimed in Claim 18, further comprising automatically offsetting said identical or modified multiple instances of said complex shapes from each other based on said parameters of said simple shape.
- 20. (new) A system for automatically constructing multiple instances of complex shapes based on a simple shape, said method employing a computing system having

S/N 09/727,054 AMENDMENT PATENT ATTY DOCKET NO. 0266-0001

graphic display means, data entry means, data processing means and a memory, said system comprising:

means for entering and storing said complex shapes into said computing system;
means for entering and storing shape translation data into said computing system;
means for entering and storing said simple shape into said computing system;
means for computing said multiple instances of complex shapes based on
parameters of said simple shape; and

means for displaying said multiple instances of complex shapes on said monitor.

21. (new) A system as claimed in Claim 20, further comprising means for automatically offsetting said identical or modified multiple instances of said complex shapes from each other based on said parameters of said simple shape.

## REMARKS

This is in response to the Office Action mailed on a May 24, 2004, Confirmation No. 2710. A request for a one-month extension of time to and including September 24, 2004 is being filed herewith. By the present amendment, rejected claims 1 through 15 are canceled, claim 16 is amended and new claims 17 through 21 are added.

The above amendments further clarify aspects of applicants' invention which are believed to distinguish over anything taught by the applied references, the patents to Taylor (US 5,307,295), and Hewlett (US 5,828,485). In this regard, the amended claims as presently submitted call for a method for constructing multiple instances of complex shapes based on a simple shape without the necessity of repeating the entering and storing of the simple shape. Newly submitted claims 18 and 20 similarly call for a system for automatically constructing multiple identical or modified instances of complex shapes based on a simple shape, also without repeating entering and storing of the simple shape.

Support for these amended and new claims is found, for example, at page 10, line 31 through page 11, line 6 of the Detailed Description, wherein the example of constructing multiple instances of a truss is given. As described in this portion of the written description and as shown in the drawings, multiple instances of either an identical or a modified truss are constructed by using the single simple shape, in the example